FIELD APPROVAL APPLICATION STANDARD DATA PACKAGE

SPOKANE FLIGHT STANDARDS DISTRICT OFFICE JANUARY 2004

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INTRODUCTION

This information package has been assembled to assist aircraft/maintenance personnel in standardizing the procedure for the application for a "field approval."

In the process of altering an aircraft, the alteration must conform to previously approved data. This data may be in the form of information developed by the aircraft manufacturer, information developed by individuals for the use of others (the Supplemental Type Certificate (STC)) or by the applicant and approved by the FAA or its representatives for one specific aircraft.

Order 8300.10 Airworthiness Inspector's Handbook Vol.2 Chap 1: specifies those types of alterations that may be approved, under specific conditions, for field approval. This reference also lists those types of alterations that must either be evaluated by the FAA engineering department or the STC process.

Order 8110.45 Use Of Data Approved By Designated Engineering Representatives To Support Major Alterations: describes how data approved by Designated Engineering Representatives (DERs) may be used to support major alterations.

Order 8110.46 Major Alterations That Will Require Supplemental Type Certificates: gives further assistance in selecting whether the services of a DER or the a "engineering-coordinated field approval would be appropriate to a particular alteration project.

Advisary Circular AC43-FLD (Draft) may be found on our web site: (http://www2.faa.gov/fsdo/geg/AC43FLD draft7.doc) This is a draft document. It has good information regarding the "Standard Data Package" (SDP), which is comprised of the Field Approval Checklist, copies of any data describing the alteration, and FAA Form 337. While the SDP is not a regulatory requirement, it is to become the most effective way to make application for a field approval.

INSTRUCTIONS FOR COMPLETING THE FIELD APPROVAL CHECKLIST FORM

The person requesting the field approval may use this form to provide the requested data, forms, descriptive items, and other information. If this form is not used, an equivalent method for presenting the information and data may be used. The checklist form (or equivalent), its attachments, Federal Aviation Administration (FAA) Form 337, Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance), and the data make up the standard data package (SDP). The following instructions apply to corresponding items 1 through 12 of the form as illustrated in this appendix.

Item 1—Aircraft. Information to complete the Make, Model, and Serial Number blocks will be found on the aircraft manufacturer's identification plate. The Registration Number is the same as shown on AC Form 8050-3, Certificate of Aircraft Registration (the N number).

Note: Only U.S.-registered aircraft are eligible for field approvals.

Item 2—Aircraft Owner. Enter the aircraft owner's name, address, and telephone number.

Item 3—Type of Product and Certification Basis. On the upper line, enter a check mark in the appropriate box to identify the item being approved. If the item is not one of the three listed, check the Other box and enter the product's description in the space provided. On the bottom line, check the box that identifies how your aircraft or product was certificated. If you don't know this information, you can find it on the Type Certificate Data Sheet (TCDS) for your aircraft or engine. On the TCDS, look in the section titled Certification Basis.

Item 4—Brief Description of Project. Using the space provided, enter a short summary of the proposed alteration or repair, e.g., "Installing a GPS in the instrument panel above the right yoke." If additional space is needed, attach a continuation page and make a note of that on the form in this area.

Item 5—Schedule for Completion of Project. On the first line, enter the date when you need the field approval. On the second line, enter the date when you plan to start the work, and on the last line, enter the date when you expect to have the work done.

Item 6—Who Will Perform the Alteration or Repair? On the top line, enter the name of the certificated mechanic who will be doing the work. If a repair station is doing the work, leave the mechanic's name blank and enter the name of the repair station. On the second line, enter the mechanic's A&P certificate number, or if a repair station is doing the work, its certificate number. Also enter a contact name if you are using a repair station. If the inspector doing the approval has a question and you are not available, this will make it easier for him/her her to find someone knowledgeable about the project. On the third line, give the telephone number and fax number for either the mechanic doing the work, or the repair station. On the bottom line, enter where the work will be done. This should be as complete as possible.

Item 7—Designees (DARs and DERs). If you are working with any Designated Engineering Representatives (DER) or Designated Airworthiness Representatives (DAR) for this project, include their names and telephone numbers in case the inspector needs to contact them for additional information or clarification. DERs have limitations to their authorization(s). If you are working with a designee, check with him or her to make sure that the work you want the designee to do is within the scope of his or her authorization.

Item 8—Compliance Statement and Compliance Checklist. Before completing the alteration or repair to your aircraft, be aware that after it has been altered or repaired it must still meet its certification basis. In this section you include the proof (data) that it still does. Your compliance statement should explain how your aircraft still meets its certification basis. For instance, if you want to modify the wheels of your small airplane, you would need to ensure that the altered wheels still conform to section 23.731. The compliance checklist will list each affected Federal Aviation Regulation (FAR) or Civil Air Regulation (CAR) and indicate how compliance was shown. This checklist is created by the person doing the alteration or repair and should address each section of the FAR/CAR applicable to the project. Appendix 2 has a sample compliance checklist format.

Item 9—Previous Alterations or Repairs that May be Affected by This Alteration. Look at the aircraft and review its records to determine if there are any modifications, Supplemental Type Certificates (STC), repairs, or alterations that could cause a problem or conflict with the proposed alteration or repair. If an FAA Form 337 was completed for any repair or alteration that might be affected, include it. If a logbook entry was made concerning the work done, make a copy of that entry and include it in your package. Photographs and drawings of previous alterations or repairs that might be a factor can also be very helpful.

Item 10—Instructions for Continued Airworthiness (ICA). In this attachment, describe how you will keep the altered or repaired part of the aircraft airworthy. This might include inspections that need to be done each 100 hours or during the annual inspection. These should be specific instructions that include what should be looked at and minimum or maximum measurements of parts for wear or deterioration. Troubleshooting, functional checks, installation and removal procedures, and servicing requirements, such as fluid change intervals or lubrication schedules, are also items that would be included. Figure 1 provides guidance and a sample checklist for creating ICAs.

Item 11—Airplane Flight Manual Supplement (AFMS). If you have an AFMS for your alteration, include a copy of it. Guidance for creating an AFMS is available in AC 23-8, Flight Test Guide for Certification of Part 23 Airplanes, as amended. Appendix 5 of AC 23-8 has a sample format that can be used. AFMS must be submitted with the data package but are approved by the Aircraft Certification Office. The FSDO will coordinate this work.

Item 12—Data Attached. A list of the data that is commonly included in the SDP is displayed in Block 12. If the data you are attaching is included on this list, check the appropriate box. If you have data or information that is not included in this list, check the box labeled Other and enter a short description of what you are including in the space provided.

Item 13—FAA Use Only. Don't write or mark in this area, it is for FAA use only.

	FIELD APPR	ROVAL CH	HECKLIST								
Instructions: Print or type FAA.	pe all entries. This information should	d be as compl	ete as possible prior to your initial discussion with the								
1. Aircraft	Make		Model								
	Registration Number		Serial Number								
2. Owner	Name		Address/Telephone Number								
3. Type of Product an Type Certificate Number	nd Certification Basis er										
□ AIRFRAME □	ENGINE	□ OTHER									
□ Part 23 □ Part 25 □ CAR 8 □ CAR 1:		31 □ Part 3	\square CAR 3 \square CAR 4(b) \square CAR 6 \square CAR 7								
4. Brief Description of	f Project										
(-44111'4'1	· (C 1)										
(attach additional pages 5. Schedule for Comp											
Date when field approv	ral is pandad:										
Projected completion da	ate for alteration:		- -								
Date aircraft will be ava	ailable for inspection:		-								
6. Who Will Perform	the Alteration or Repair?										
Mechanic's name:		or Repair s	etation:								
		Contact	Person:								
Location where alteration	on/repair will be accomplished:	rax IIui	nber:								
7. Designees (DARs a											
7. Designees (DARs at	ilu DEKS) 🗆 None										
Names and telephone numbers of the Designated Engineering Representatives, (DER) and/or Designated Airworthiness Representatives (DAR) who are helping with the project:											
	who are helping with the project:		Telephone number:								
			Telephone number:								

EIELD ADDD	AOVAL CHECKLICE (C. 4. IV
	OVAL CHECKLIST (Continued)
8. Compliance Statement and Compliance Checklis	(See Compliance Checklist on page 5)
Attach the Compliance Checklist that you completed.	
	fected by This Alteration (Attach copies of Form 337 or maintenance
record entries for package evaluation)	(
running transmissing	
10. Instructions for Continued Airworthiness (ICA)) (See ICA checklist on pages 6 & 7)
☐ ICAs attached	
Include relevant ICAs in block 8 of the FAA Form 337	
11. Aircraft Flight Manual Supplement (AFMS)	
Do you have an AFMS? ☐ Yes ☐ No	If yes, attach a copy.
12. Data Attached	J / 1J
☐ Proposed FAA Form 337	□ Other
☐ Description of alteration, including ICA	
☐ Drawings, schematics, and diagrams	
☐ Material list	
□ Processes	
☐ Specifications	
☐ Previous field approvals	
☐ FAA Form(s) 8110-3	
☐ Test data and/or flight test data	
☐ Load analysis (electrical and/or structural)	
☐ Weight & Balance Report	
12 FAA II. O. I	
13. FAA Use Only	
Date:	
Assigned inspector:	
FAA officeAdditional information required:	
Additional information required:	

INSTRUCTIONS FOR COMPLIANCE CHECKLIST

The purpose of the compliance checklist is to document which regulations are applicable to the field approval requested, and how compliance with those regulations was shown. Instructions for completing this sample compliance checklist are as follows:

- **1. 14 CFR Part/CAR Paragraph.** Specific applicable regulations may be listed by number, e.g., 14 CFR part 23, section 23.1353.
- **2. Subject.** The subject or title of the 14 CFR part/CAR applicable paragraphs, e.g., Storage battery design and installation.
- **3. Method of Compliance.** The method of compliance may include design drawings (D), analyses (A), tests (T), or other methods (O). Some compliance checklists simply list the letter corresponding to the applicable methods of compliance. Other compliance checklists reference specific data by title or number. The applicant and the FAA inspector should agree upon the format.
- **4. Documentation Reference.** List the documentation (test report number, analysis report number, and so forth) that demonstrated compliance to the subject 14 CFR part or CAR paragraph.

COMPLIANCE CHECKLIST

14 CFR Part/CAR Paragraph	Subject	Method of Compliance	Documentation Reference
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INSTRUCTIONS FOR CONTINUED AIRWORTHINESS (ICA) CHECKLIST

A/C Make:	Model:	
S/N:	Reg. # N:	
Revision:	Date:	
System:		

INSTRUCTIONS: Review each item for applicability. If the item does not apply, mark N/A. Include those items that do apply in Block 8 of Form 337 as ICAs, or if extensive, use separate sheet and attach to Form 337.

Item	Subject	Ck
1.	Introduction: Briefly describes the aircraft, engine, propeller, or component that has been altered. Include any other information regarding the content, scope, purpose, arrangement, applicability, definitions, abbreviations, precautions, units of measurement, referenced publications, and distribution of the ICA, as applicable.	
2.	Description: Of the major alteration and its functions, including an explanation of its interface with other systems, if any.	
3.	Control, operation information: Or special procedures, if any.	
4.	Servicing information: Such as types of fluids used, servicing points, and location of access panels, as appropriate.	
5.	Maintenance instructions: Such as recommended inspection/maintenance periods in which each of the major alteration components are inspected, cleaned, lubricated, adjusted, and tested, including applicable wear tolerances and work recommended at each scheduled maintenance period. This section can refer to the manufacturers' instructions for the equipment installed where appropriate (e.g., functional checks, repairs, inspections). It should also include any special notes, cautions, or warnings, as applicable.	
6.	Troubleshooting information: Describes probable malfunctions, how to recognize those malfunctions, and the remedial actions to take.	
7.	Removal and replacement information: Describes the order and method of removing and replacing products or parts, and any necessary precautions. This section should also describe or refer to manufacturer's instructions to make required tests, checks, alignment, calibrations, center of gravity changes, lifting, or shoring, etc., if any.	
8.	Diagrams: Of access plates and information, if needed, to gain access for inspection.	
9.	Special inspection requirements: Such as X-ray, ultrasonic testing, or magnetic particle inspection, if required.	
10.	Application of protective treatments: To the affected area after inspection and/or maintenance, if any.	

Item	Subject	Ck
11.	Data: Relative to structural fasteners such as type, torque, and installation requirements, if any.	
12.	List of special tools: Special tools that are required, if any.	
13.	For commuter category aircraft: Provide the following additional information, as applicable: A. Electrical loads B. Methods of balancing flight controls C. Identification of primary and secondary structures D. Special repair methods applicable to the aircraft	
14.	Recommended overhaul periods: Required to be noted on the ICA when an overhaul period has been established by the manufacturer of a component or equipment. If no overhaul period exists, the ICA should state for item 14, "No additional overhaul time limitations."	
15.	Airworthiness limitation section: Includes any "approved" airworthiness limitations identified by the manufacturer or FAA Type Certificate Holding Office (e.g., An STC incorporated in a larger field approved major alteration may have an airworthiness limitation). The FAA inspector should not establish, alter, or cancel airworthiness limitations without coordinating with the appropriate FAA Type Certificate Holding Office. If no changes are made to the airworthiness limitations, the ICA should state for item 15, "No additional airworthiness limitations" or "Not Applicable."	
16.	Revision: Includes information on how to revise the ICA. For example, a letter will be submitted to the local FAA Office with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing block 3 and including the following statement, "The attached revised/new Instructions for Continued Airworthiness (date) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (date)." After the revision has been accepted, a maintenance record entry will be made, identifying the revision, its location, and date on the FAA Form 337.	

INSTRUCTIONS FOR COMPLETION OF FORM 337

The person who performs or supervises a major alteration should prepare the FAA Form 337. The form is executed at least in duplicate and is used to record major alterations made to an aircraft, powerplant, propeller or appliance. The following instructions apply to the corresponding items 1 through 8 of the Form 337.

- **Item 1 Aircraft:** Information to complete the "make," "model," and "serial number" blocks will be found on the aircraft manufacturer's identification (data) plate. The "Nationality (N) and registration number is the same as shown on Aircraft Registration Form.
- **Item 2 Owner:** Enter the owner's complete name as shown on the Aircraft Registration Form.
- **Item 3 For FAA Use Only:** Approval of an alteration may be indicated in Item 3 when the FAA determines that the data to be used in performing a major alteration complies with accepted industry practices and all applicable FAR. Approval is indicated by the following or similar entry: "The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, Section 43.7
- **Item 4 Unit Identification:** The information blocks under Item 4 are used to identify the airframe, powerplant, propeller, or appliance being altered. It is only necessary to complete the blocks for the unit to be altered.
- **Item 5 Type:** Enter a check or X in the appropriate block to indicate the unit was altered.

Item 6 – Conformity Statement:

- "A" Agency's Name and Address: Enter the name of the mechanic or repair station who will accomplish the alteration. Mechanics should enter either their permanent mailing address or their place of business address. Repair stations should use their business name and address.
- **"B" Kind of Agency:** Mark the appropriate box to indicate either Mechanic or repair station.
- "C" Certificate Number: Mechanics should enter their A&P number in this block. Repair stations should enter their CRS number and the rating(s) under which the work will be performed.
- **"D" Compliance Statement:** This space includes the statement certifying that the work has been done in accordance with the information included on the reverse side of the Form 337. When the work is done, the mechanic doing or supervising the alteration will date and sign the appropriate blocks.
- **Item 7 Approval for Return to Service:** This portion of the form is used to indicate approval or rejection of the alteration of the unit involved and to identify the person or agency making the airworthiness inspection. Check the "approved" or "rejected" box to indicate the finding. Additionally, check the appropriate box to indicate who made the finding. The authorized individual who made the finding will date, sign and enter the appropriate certificate number.

Item 8 – Description of Work Accomplished. A clear, concise, and legible statement describing the work accomplished should be entered in this block. The description must include sufficient detail so that a typical mechanic who has never seen the unit herein identified could duplicate the alteration. The description must include the data used as a basis for the field approval with references to publications such as the AC43.13-1B, similar STCs, etc. (When referencing these sources, be specific, i.e. give chapter, page, paragraph numbers so FAA inspector may find the referenced material easily.)

Recording weight & balance information as well as aircraft total time in this block, while not required, is a convenient source of information if all other records become lost.

If additional space is needed to describe the alteration, attach additional sheets. Place the aircraft "N" number at the upper right-hand corner for identification.

The FAA Form 337 is not authorized for use on other than U.S. registered aircraft.

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MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020
For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

				1 Federal Aviation				nare to rep	ort our roodic in ort	ii periany i	TOC TO CAUCUA	01,000
		Make						Model				
1. A	ircraft	Serial No.					Nationality and Registration Mark					
2. O	wner	Name (As shown on registration certificate)						Address (As shown on registration certificate)				
						3. F	For FAA Use Onl	у				
						4. (Unit Identificatio	n			5. Type	
	Unit		Mai	ке			Model		Serial No		Repair	Alteration
AIRF	RAME	-			(As de	escribe	ed in Item 1 above	e) ——				
POW	VERPLAN											
PRO	PELLER	.ER										
APPLIANCE -		Туре										
		Manufacturer										
	111.000					_	informity Statem	ent			V01 800	
A. A	gency's N	s Name and Address B. Kind of Agency C. Certificate No.										
				-	U.S. Certificated Mechanic Foreign Certificated Mechanic							
							Certificated Repair Station					
							Manufacturer					
D.	have be	en made in accor	rdanc		nents o	of Part	43 of the U.S. Fe		and described on tion Regulations ar			ents hereto
Date Signature of Authorized Individual												
					7. A	pprov	al for Return To	Service				
Pu	rsuant to Iministrate	the authority give r of the Federal	n per Aviati	sons specified belo on Administration a	ow, the	e unit i	dentified in item 4	was insp	ected in the manne EJECTED	r prescribe	d by the	
BY		A Fit. Standards ector		Manufacturer		Ins	spection Authoriza	ition	Other (Specify)			
		Designee		Repair Station		Ca	Person Approved by Transport Canada Airworthiness Group					
Date of Approval or Rejection Certificate or Designation No.					Sig	Signature of Authorized Individual						

FAA Form 337 (12-88)

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Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.
8. Description of Work Accomplished (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)
☐ Additional Sheets Are Attached

NOTICE

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